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## DISCUSSION

### REPLY TO PROFESSOR BAGLEY

What surprises me most in Professor Bagley's in the main courteous criticism of my paper is that it cites no other books or papers by chapter and verse, refers to no specific experiment, and, to my thinking, mentions no definite results achieved by the method to which he complains that I do injustice.<sup>1</sup> This generalized way of writing is entirely legitimate, but it hardly meets the challenge of a paper most of whose statements, right or wrong, are supported by references to volume and page. I have no doubt that my papers, like all works of fallible man, contain errors and inadvertences. But Professor Bagley does not help me to find, correct, and apologize for them. Even in so simple a matter as my alleged misrepresentation of his own opinions he withholds his aid. I referred to one or two arguments of his, by book and page, merely to illustrate in the concrete the kind of reasoning that I deprecate. I am still in doubt whether he thinks that I misrepresented those particular arguments or whether his point is that he has elsewhere expressed himself differently or more fully on the whole problem of the transference of discipline. In the first case, if he convicts me of substantive error, I will gladly apologize for my unintentional misapprehension. In the second case I can only reply that a paper on "The Case for the Classics" was obviously not an exhaustive monograph on the various views of the educational writers whose particular opinions or methods I opposed. It must have been clear to the intelligent reader that on pp. 607-8 I was merely satirizing by typical examples the quality of the arguments which many writers on education drew from the armory of experimental psychology for the attack on the traditional idea of the disciplinary value of the classics. To such authorities of the new "science" I opposed the long tradition of common-sense, represented by another typical list of names. It is open to Professor Bagley to argue that this was a shallow procedure, though of course I do not think so. But he really ought not to talk about a "code of honor." The implications of that and similar phrases which he employs have no application to rhetorical exaggerations of general propositions, or dogmatism in the affirmation of opinions, supposing my papers to exhibit these faults. It is no more a violation of the "code of honor" of loyal controversy to say that there are no "experiments that teach us anything about the higher mental processes which we cannot observe and infer by better and more natural methods," than it would be to affirm that the study of Latin

<sup>1</sup> *School Review*, May, 1912, pp. 343-46. The papers referred to were in the *School Review* for November, 1910 (pp. 585-617), and February, 1912 (pp. 73-80).

and Greek imparts no discipline that could not be better gained from other studies. The "code of honor" in controversy relates to intentional misrepresentation of individuals, and Professor Bagley ought not to have used that phrase without convicting me of such misrepresentation in particular cases. Even then it would be a harsh expression. The late Professor James Adam once dropped a "not" from one of my sentences and proceeded to assail the opinion thus attributed to me. I naturally protested, but I did not impute intention to him. And Professor Bagley, to judge from his final sentence, does not really mean to do so in my case. But his phrasing is unfortunate and makes it difficult to discuss any other issue. I must repeat, then, that when I have censured or satirized individuals I have tried to cite page and volume correctly. If in 119 crowded footnotes I have somewhere slipped into error, it is inadvertently, and I am ready to express regret as soon as the specific error is clearly pointed out.

Professor Bagley compliments my reading at the expense of my candor when he assumes that I deceive my public if I fail to mention any writer (e.g., Mark Twain) whom his reading suggests to him. He can hardly be serious in the suggestion that a cowardly prudence caused me to omit the name of William James from the list of those opposing the older dogma of formal discipline. But if he were, he would be sufficiently answered by a reference to my article on "The Equivocations of Pragmatism" in the *Dial* for November 1, 1907, where I write of Professor James's work in a style which those who do not believe in freedom of discussion might think unbecoming toward so great a man, but which is certainly not timid. My reason for not quoting James in the present connection is apparent from note 5 of "The Case for the Classics," where I say, "No rational advocate would now recommend either Latin or botany on the ground that it *exercises the memory*." I am not a specialist in recent psychological literature, and Professor Bagley may know of some later work of Professor James that has escaped me. I know in this matter only his experiments in memorizing verses in different languages, and, as the note already quoted shows, I did not regard the foolish argument that learning Greek and Latin paradigms strengthens the memory as relevant to the issue. I learned before graduating from college, and have taught my students for twenty-five years, that the total plasticity of memory is in the main determined for each individual by physiologically fixed limits,<sup>1</sup> and that therefore the true prudence of the conduct of the understanding, and the fundamental principle of educational economy, is not to spend the memory on useless things. If I had been writing on psychology and not "The Case for the Classics," I should have added that this problem of memory is far more complicated than it appears in Professor James's almost childishly simple experiments. Any thoughtful teacher of language who has observed his own

<sup>1</sup>[Professor James could have found this where he found many things—in Emerson. See the essay on Memory from the lectures on "The Natural History of the Intellect" which Emerson gave at Harvard in 1870-71.]

memory and the memory of his students for twenty or thirty years would cheerfully engage to state three true propositions about memory and the association of ideas for every one that these experiments or any similar experiments known to me establish. The effect on one field of memory of exercise in another obviously depends mainly on the number of common elements. The first prerequisite of sound experimentation in this domain is a careful analysis of such elements; which would, however, require both more psychology and more knowledge of language than are usually available in the psychological laboratory. I cannot take space here to dwell on the neglect of these considerations in Professor James's experiments. But here is one specimen of laboratory methods in these complicated questions for which I cannot at this moment cite the source. A German investigator argues that a determined or fettered association is quicker than a free or general one, as proved by the fact that the subject answers more quickly the question, "Name the first work of Goethe," than "Name a work of Goethe." How much common-sense does it require to perceive that this depends largely on the degree of the subject's familiarity with Goethe's life and works? One who knows them well might hesitate to choose and so delay the reaction. But what if he did not know them well? The limiting determination might then be a hindrance, while to the general question he would shout "*Faust*" at once. The fact is that an intelligent teacher of language and literature is trying better experiments in association and memory every day of his life than any that I have been able to find in the reports from the laboratories. And I expressly limited my skepticism to the higher mental processes. I neither affirm nor deny the contribution of laboratory experiment to our knowledge of the so-called lower or more elementary processes of mind or sense. For I do not know.

To all this Professor Bagley replies in the main with prophecy. Experimentation ought to, must, will, yield important results. Meanwhile it has clarified our ideas, and improved terminology, and the necessity for it is demonstrated by existing differences of opinion which can be settled in no other way. With prophecy I do not meddle. My point is that thus far experimental psychology has contributed *little* to educational theory in compensation for the confusion which it has introduced by its falsifying simplification of problems and conditions, and the overconfidence which its claim to the title of "science" inspires.

The clarification of ideas I admit for those who have no clear ideas on the subject without or in advance of experimentation. Anything that compels you to think about a question, however mechanically, may clarify your ideas. And so far as it clarifies ideas it might conceivably improve terminology. But Professor Bagley's anticipations of a psychological language defecated to a pure transparency from physical metaphor is a utopian illusion. The language of psychology will always prove equivocal under close scrutiny, because, as Spencer says, we are compelled to express mind in terms of matter and matter in terms of mind; or as Bergson would phrase it, we translate duration into

time, and time into space. The supposed overthrow of the "faculty psychology" has not appreciably lessened the convenience, perhaps the necessity, of speaking of faculties and mental powers. Spencer himself, anything but a faculty psychologist, repeatedly speaks of mental powers, sometimes without, sometimes with, the amplification, "those functions which are what we call faculties or mental powers."<sup>1</sup> These are the unavoidable compromises of thought with language, and the remedy is not the invention of new terminologies, but the skill of the writer to make his meaning clear by the context, and the intelligence of the reader to interpret the context as a whole. I do not, of course, intend to deny all possibility of improvement in the technical language of educational psychology. But here again Professor Bagley leaves me in the lurch. He denounces what seem to me necessary conventions and compromises of our present speech, but cites no specific improvement which we owe to experimentation. For I cannot recognize as such the simple phrases "concepts of method" and "ideals of procedure." Glancing at an earlier article in the same number of this journal by a distinguished professor of education, I find "ninety ability-atoms." But that does not seem to me any more free from physical metaphor than is "the reprehensible expression 'mental powers.'"

As for differences of opinion, opinions will continue to differ—but whether laboratory experiment has adjudicated or can adjudicate in these delicate matters is precisely the question at issue. Professor Bagley mentions two problems, the "spread of discipline," which being the very question in debate is inadmissible, and the presence in reflective thought of definite memory images. I have been interested in the second problem for thirty years and would welcome what I have not discovered—any enlightenment that I had not already found in Aristotle, Locke, Berkeley, Hume, the Mills, Schopenhauer, and Taine.

If, not finding what I seek in Professor Bagley's brief note, I turn again to the papers on the measurement of educational products, I am equally at a loss. It is quite true that education *en masse* requires the control of carefully kept records. I do not doubt that some profitable suggestions may be won from the study of the immense material accumulated in our school and college archives. An ideal marking system, if we could get it, would employ scales and measurements as precise as those of the physical sciences. These truisms and the prophecies of such a system make pleasant reading. But what is the present contribution of educational science to the establishment of such a scale? Why, this: By converting into absolute estimates the relative judgments of 200 educated men on six poor school-boy compositions, the compositions may be marked, in order of demerit, 26, 37, 47, 58, 67, 77. Assume, whether in the name of science or of common-sense, that the average judgment of 200 such experts is more likely to be right than that of the ordinary teacher. Grant further that the method of stating their resultant judgment here

<sup>1</sup> *Psychology*, Part VIII, chap. ii.

employed is more scientific than a mere average of 200 markings would be. We still ask, what possible bearing can this have on the real problems of the overworked teacher of English composition? Is he to submit his pupils' daily or weekly themes to a jury of 200? Or try to classify them by his own estimate of their resemblance to the marked samples supplied to him? Plainly he must mark them as best he may, with such intelligence as he possesses. The test of the new science of educational measurement would be to evolve from averages, statistics, or the laboratory, a guide, the study of which will profit the unhappy assistant in English more than an equal amount of time spent in improving his intelligence and extending his acquaintance with the English language and literature. When such a book appears I shall be happy to review it.

To conclude with one of Professor Bagley's minor complaints, I have no statistics as to the precise number of writers on education who in the past ten or fifteen years have used against Latin and algebra the argument that science has disproved the transference of discipline. My impression is that it is a large, perhaps an "overwhelming," majority.<sup>1</sup> I have quoted several. I can quote more if necessary. But I should like first to learn of a few who have never made any use of this argument. I have also an impression that in the last year or two there has been a tendency to "hedge" on this point. It would be unkind to press the query whether this is wholly due to an improvement in the methods of experimentation.

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### THE STUDENT BOOK AGENT

Among the delights of the summer vacation there is one which deserves a far more considerable attention than it has hitherto obtained, and this is the book agent of an especial breed; namely, the college youth who is trying to earn a little spare cash, and who is doing his feeble best to inflict upon a suffering world another of those monstrosities which the subscription house manufactures for the gullible. No matter where the individual may attempt to secrete himself, it is a remarkable man or woman who escapes the appeal for one whole summer; and he is strong minded withal if he escapes yielding to the lure of the plausible, eloquent, or pitiful tale.

But the nuisance of the book agent is one long since pointed out and perennially squelched—in words. It is another phase of the question which I wish to call to mind; the effect of such work upon the mental and moral makeup of an otherwise promising young man or woman is not altogether to be ignored. Most of us know in general the sort of an appeal that is made: if the book itself

<sup>1</sup>[This is certainly the impression which has somehow been given to the general public. As I revise this proof I note in the London *Times*' reprint of its letters on "Classics and the Average Boy," p. 7, this curt dismissal of the argument drawn from the disciplinary value of science and Latin: "Now it is a commonplace of psychology that this is not so."]